

## AIR QUALITY PERMIT

Issued To: Link Energy Operating Limited Partnership  
Richland Crude Oil Station  
P.O. Box 708  
Belfield, ND 58622

Permit #3183-00  
Administrative Amendment (AA)  
Request Received: 11/06/03  
Department Decision on AA: 12/30/03  
Permit Final: 01/15/04  
AFS: #083-0015

An air quality permit, with conditions, is hereby granted to Link Energy Operating Limited Partnership (Link Energy), pursuant to Sections 75-2-204 and 211 of the Montana Code Annotated (MCA), as amended, and Administrative Rules of Montana (ARM) 17.8.740, *et seq.*, as amended, for the following:

### SECTION I: Permitted Facilities

#### A. Plant Location

Link Energy owns and operates a crude oil station located in Section 2, Township 24 North, Range 58 East, in Richland County, Montana. The facility is located approximately 8 miles west of Fairview, Montana on Highway 201, and the facility is known as the Richland Crude Oil Station. The facility unloads oil from transport trucks and injects the oil into a pipeline owned by Link Energy.

#### B. Current Permit Action

On November 6, 2003, the Department of Environmental Quality (Department) received a letter from EOTT Energy Operating, L.P. (EOTT) notifying the Department that EOTT changed its name to Link Energy and that the operating entity for the Baker Station changed to Link Energy. EOTT requested that the Department update Permit #3183-00 to reflect the name change. The current permit action incorporates EOTT's request into the permit. In addition, the permit format, language, and rule references were updated to reflect the current format, language, and rule references used by the Department.

### SECTION II. Conditions and Limitations

#### A. Emission Control Requirements

1. Link Energy may not cause or authorize to be discharged into the outdoor atmosphere from any source installed after November 23, 1968, emissions that exhibit an opacity of 20% or greater averaged over 6 consecutive minutes (ARM 17.8.304).
2. Link Energy shall not cause or authorize emissions to be discharged into the atmosphere from haul trucks, access roads, parking lots, or the general plant property without taking reasonable precautions to control emissions of airborne particulate matter (ARM 17.8.308).
3. Link Energy shall treat all unpaved portions of the haul roads, access roads, parking lots, or the general plant area with water and/or chemical dust suppressant as necessary to maintain compliance with the reasonable precautions limitation in Section II.A.2 (ARM 17.8.752).

4. Link Energy shall comply with all applicable standards and limitations, and the reporting, recordkeeping, and notification requirements of 40 CFR Part 60, Standards of Performance for New Stationary Sources (NSPS), Subpart A – General Provisions, and Subpart Kb – Standards of Performance for Volatile Liquid Organic Storage Vessels (Including Petroleum Storage Vessels) for Which Construction, Reconstruction, or Modification Commenced After July 23, 1984 (ARM 17.8.340 and 40 CFR 60, Subparts A and Kb).

B. Inspection and Repair Requirements

1. Each calendar month, all fugitive piping components (valves, flanges, pump seals, open-ended lines) shall be inspected for leaks. For purposes of this requirement, detection methods incorporating sight, sound, or smell are acceptable (ARM 17.8.105 and ARM 17.8.752).
2. Link Energy shall (ARM 17.8.105 and ARM 17.8.752):
  - a. Make a first attempt at repair for any leak not later than 5 calendar days after the leak is detected; and
  - b. Repair any leak as soon as practicable, but no later than 15 calendar days after it is detected, except as provided in Section II.B.3.
3. Delay of repair of equipment for which a leak has been detected will be allowed if repair is technically infeasible without a source shutdown. Such equipment shall be repaired before the end of the first source shutdown after detection of the leak (ARM 17.8.752).

C. Operational Reporting Requirements

1. Link Energy shall supply the Department with annual production information for all emission points, as required by the Department, in the annual emissions inventory request. The request will include, but is not limited to, all sources of emissions identified in the most recent emission inventory report and sources identified in Section I.A of the permit analysis.

Production information shall be gathered on a calendar-year basis and submitted to the Department by the date required in the emission inventory request. Information shall be in units as required by the Department (ARM 17.8.505).

2. Link Energy shall notify the Department of any construction or improvement project conducted pursuant to ARM 17.8.745, that would include a change in control equipment, stack height, stack diameter, stack flow, stack gas temperature, source location or fuel specifications, or would result in an increase in source capacity above its permitted operation or the addition of a new emission unit. The notice must be submitted to the Department, in writing, 10 days prior to start up or use of the proposed de minimis change, or as soon as reasonably practicable in the event of an unanticipated circumstance causing the de minimis change, and must include the information requested in ARM 17.8.745(1)(d) (ARM 17.8.745).

D. Record Keeping Requirements

1. A record of each monthly leak inspection required by Section II.B.1 of this permit shall be kept on file with Link Energy. Inspection records shall include, at a minimum, the following information (ARM 17.8.749):
  - a. Date of inspection;
  - b. Findings (may indicate no leaks discovered or location, nature, and severity of each leak);
  - c. Leak determination method;
  - d. Corrective action (date each leak repaired and reasons for any repair interval in excess of 15 calendar days); and
  - e. Inspector's name and signature.
2. The records compiled in accordance with the requirements above shall be maintained by Link Energy as a permanent business record for at least 5 years, shall be submitted to the Department upon request, and shall be available for inspection by the Department (ARM 17.8.749).

E. Testing Requirements

1. The Department may require testing (ARM 17.8.105).
2. All compliance source tests shall conform to the requirements of the Montana Source Test Protocol and Procedures Manual (ARM 17.8.106).

SECTION III: General Conditions

- A. Inspection – Link Energy shall allow the Department's representatives access to the source at all reasonable times for the purpose of making inspections or surveys, collecting samples, obtaining data, auditing any monitoring equipment (CEMS, CERMS) or observing any monitoring or testing, and otherwise conducting all necessary functions related to this permit.
- B. Waiver – The permit and the terms, conditions, and matters stated herein shall be deemed accepted if Link Energy fails to appeal as indicated below.
- C. Compliance with Statutes and Regulations – Nothing in this permit shall be construed as relieving Link Energy of the responsibility for complying with any applicable federal or Montana statute, rule, or standard, except as specifically provided in ARM 17.8.740, *et seq.* (ARM 17.8.756).
- D. Enforcement – Violations of limitations, conditions and requirements contained herein may constitute grounds for permit revocation, penalties or other enforcement action as specified in Section 75-2-401, *et seq.*, MCA.
- E. Appeals – Any person or persons jointly or severally adversely affected by the Department's decision may request, within 15 days after the Department renders its decision, upon affidavit setting forth the grounds therefore, a hearing before the Board of Environmental Review (Board). A hearing shall be held under the provisions of the Montana Administrative Procedures Act. The Department's decision on the application is not final unless 15 days have elapsed and there is no request for a hearing under this

section. The filing of a request for a hearing postpones the effective date of the Department's decision until conclusion of the hearing and issuance of a final decision by the Board.

- F. Permit Inspection – As required by ARM 17.8.755, Inspection of Permit, a copy the air quality permit shall be made available for inspection by the Department at the location of the source.
- G. Permit Fee – Pursuant to Section 75-2-220, MCA, as amended by the 1991 Legislature, failure to pay the annual operation fee by Link Energy may be grounds for revocation of this permit, as required by that section and rules adopted thereunder by the Board.

Permit Analysis  
Link Energy Operating Limited Partnership  
Permit #3183-01

I. Introduction/Process Description

A. Permitted Equipment

Link Energy Operating Limited Partnership (Link Energy) owns and operates a crude oil station located in Section 2, Township 24 North, Range 58 East, Richland County, Montana. The facility is located approximately 8 miles west of Fairview, Montana on Highway 201. The facility is known as the Richland Crude Oil Station and the facility includes the following permitted equipment:

Tanks	Year Constructed	Capacity
Tank 88272	1998	400 barrel (bbl) crude oil tank
Tank 88273	1998	400 bbl crude oil tank
Tank 88274	1998	400 bbl crude oil tank
Tank 88275	1998	400 bbl crude oil tank
Pipeline Component Fugitives (includes 2 100-gallon sump boxes and truck unloading rack)		
Unpaved Road Fugitives		

B. Source Description

The Link Energy facility is used to unload oil from transport trucks and to inject the oil into a pipeline owned by Link Energy. Following permit action #3183-01, the maximum throughput for the facility will be 1,576,800 barrels per year (bbl/yr).

C. Permit History

On January 2, 2002, EOTT Energy Operating L.P. (EOTT) submitted a complete permit application for a crude oil station. The facility was identified as the Richland Crude Oil Station and consisted of four 400-bbl crude oil storage tanks and miscellaneous emissions from pipeline components. On March 27, 2002, Permit **#3183-00** was issued as final.

D. Current Permit Action

On November 6, 2003, the Department of Environmental Quality (Department) received a letter from EOTT notifying the Department that EOTT changed its name to Link Energy and that the operating entity for the Baker Station changed to Link Energy. EOTT requested that the Department update Permit #3183-00 to reflect the name change. The current permit action incorporates EOTT's request into the permit. In addition, the permit format, language, and rule references were updated to reflect the current format, language, and rule references used by the Department. Permit **#3183-01** replaces Permit #3183-00.

E. Additional Information

Additional information, such as applicable rules and regulations, Best Available Control Technology (BACT)/Reasonably Available Control Technology (RACT) determinations, air quality impacts, and environmental assessments, is included in the analysis associated with each change to the permit.

## II. Applicable Rules and Regulations

The following are partial explanations of some applicable rules and regulations that apply to the facility. The complete rules are stated in the Administrative Rules of Montana (ARM) and are available, upon request, from the Department. Upon request, the Department will provide references for location of complete copies of all applicable rules and regulations or copies where appropriate.

### A. ARM 17.8, Subchapter 1 – General Provisions, including but not limited to:

1. ARM 17.8.101 Definitions. This rule includes a list of applicable definitions used in this chapter, unless indicated otherwise in a specific subchapter.
2. ARM 17.8.105 Testing Requirements. Any person or persons responsible for the emission of any air contaminant into the outdoor atmosphere shall, upon written request of the Department, provide the facilities and necessary equipment (including instruments and sensing devices) and shall conduct tests, emission or ambient, for such periods of time as may be necessary using methods approved by the Department.
3. ARM 17.8.106 Source Testing Protocol. The requirements of this rule apply to any emission source testing conducted by the Department, any source or other entity as required by any rule in this chapter, or any permit or order issued pursuant to this chapter, or the provisions of the Clean Air Act of Montana, 75-2-101, *et seq.*, Montana Code Annotated (MCA).

Link Energy shall comply with the requirements contained in the Montana Source Test Protocol and Procedures Manual, including, but not limited, using the proper test methods and supplying the required reports. A copy of the Montana Source Test Protocol and Procedures Manual is available from the Department upon request.

4. ARM 17.8.110 Malfunctions. (2) The Department must be notified promptly by telephone whenever a malfunction occurs that can be expected to create emissions in excess of any applicable emission limitation or to continue for a period greater than 4 hours.
5. ARM 17.8.111 Circumvention. (1) No person shall cause or permit the installation or use of any device or any means that, without resulting in reduction of the total amount of air contaminant emitted, conceals or dilutes an emission of air contaminant that would otherwise violate an air pollution control regulation. (2) No equipment that may produce emissions shall be operated or maintained in such a manner as to create a public nuisance.

### B. ARM 17.8, Subchapter 2 – Ambient Air Quality, including, but not limited to the following:

1. ARM 17.8.204 Ambient Air Monitoring
2. ARM 17.8.210 Ambient Air Quality Standards for Sulfur Dioxide
3. ARM 17.8.211 Ambient Air Quality Standards for Nitrogen Dioxide
4. ARM 17.8.212 Ambient Air Quality Standards for Carbon Monoxide
5. ARM 17.8.213 Ambient Air Quality Standard for Ozone
6. ARM 17.8.214 Ambient Air Quality Standard for Hydrogen Sulfide
7. ARM 17.8.220 Ambient Air Quality Standard for Settled Particulate Matter
8. ARM 17.8.221 Ambient Air Quality Standard for Visibility
9. ARM 17.8.222 Ambient Air Quality Standard for Lead
10. ARM 17.8.223 Ambient Air Quality Standard for PM<sub>10</sub>

Link Energy must maintain compliance with the applicable ambient air quality standards.

C. ARM 17.8, Subchapter 3 – Emission Standards, including, but not limited to:

1. ARM 17.8.304 Visible Air Contaminants. This rule requires that no person may cause or authorize emissions to be discharged into the outdoor atmosphere from any source installed after November 23, 1968, that exhibit an opacity of 20% or greater averaged over 6 consecutive minutes.
2. ARM 17.8.308 Particulate Matter, Airborne. (1) This rule requires an opacity limitation of less than 20% for all fugitive emission sources and that reasonable precautions be taken to control emissions of airborne particulate matter. (2) Under this rule, Link Energy shall not cause or authorize the use of any street, road, or parking lot without taking reasonable precautions to control emissions of airborne particulate matter.
3. ARM 17.8.309 Particulate Matter, Fuel Burning Equipment. This rule requires that no person shall cause, allow or permit to be discharged into the atmosphere particulate matter caused by the combustion of fuel in excess of the amount determined by this rule.
4. ARM 17.8.310 Particulate Matter, Industrial Process. This rule requires that no person shall cause, allow or permit to be discharged into the atmosphere particulate matter in excess of the amount set forth in this rule.
5. ARM 17.8.322 Sulfur Oxide Emissions--Sulfur in Fuel. This rule requires that no person shall burn liquid, solid, or gaseous fuel in excess of the amount set forth in this rule.
6. ARM 17.8.324 Hydrocarbon Emissions--Petroleum Products. (3) No person shall load or permit the loading of gasoline into any stationary tank with a capacity of 250 gallons or more from any tank truck or trailer, except through a permanent submerged fill pipe, unless such tank is equipped with a vapor loss control device as described in (1) of this rule.
7. ARM 17.8.340 Standard of Performance for New Stationary Sources and Emission Guidelines for Existing Sources. This rule incorporates, by reference, 40 CFR 60, Standards of Performance for New Stationary Sources (NSPS).

40 CFR 60, Subpart Kb – Standards of Performance for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for Which Construction, Reconstruction, or Modification Commenced After July 23, 1984. Tanks 88272, 88273, 88274, and 88275 are subject to Subpart Kb.

D. ARM 17.8, Subchapter 5 – Air Quality Permit Application, Operation and Open Burning Fees, including, but not limited to:

1. ARM 17.8.504 Air Quality Permit Application Fees. This rule requires that an applicant submit an air quality permit application fee concurrent with the submittal of an air quality permit application. A permit application is incomplete until the proper application fee is paid to the Department. The current permit action is considered an administrative action; therefore, a permit application fee was not required.
2. ARM 17.8.505 When Permit Required--Exclusions. An annual air quality operation fee must, as a condition of continued operation, be submitted to the Department by each source of air contaminants holding an air quality permit (excluding an open burning permit) issued by the Department. The air quality operation fee is based on the actual or estimated actual amount of air pollutants emitted during the previous calendar year.

An air quality operation fee is separate and distinct from an air quality permit application fee. The annual assessment and collection of the air quality operation fee, described above, shall take place on a calendar-year basis. The Department may insert into any final permit issued after the effective date of these rules, such conditions as may be necessary to require the payment of an air quality operation fee on a calendar-year basis, including provisions that prorate the required fee amount.

- E. ARM 17.8, Subchapter 7 – Permit, Construction and Operation of Air Contaminant Sources, including, but not limited to:
1. ARM 17.8.740 Definitions. This rule is a list of applicable definitions used in this chapter, unless indicated otherwise in a specific subchapter.
  2. ARM 17.8.743 Montana Air Quality Permits--When Required. This rule requires a person to obtain an air quality permit or permit alteration to construct, alter or use any air contaminant sources that have the Potential to Emit (PTE) greater than 25 tons per year of any pollutant. Link Energy has the PTE more than 25 tons per year of Volatile Organic Compounds (VOC's); therefore, a permit is required.
  3. ARM 17.8.744 Montana Air Quality Permits--General Exclusions. This rule identifies the activities that are not subject to the Montana Air Quality Permit program.
  4. ARM 17.8.745 Montana Air Quality Permits--Exclusion for De Minimis Changes. This rule identifies the de minimis changes at permitted facilities that do not require a permit under the Montana Air Quality Permit Program.
  5. ARM 17.8.748 New or Modified Emitting Units--Permit Application Requirements. (1) This rule requires that a permit application be submitted prior to installation, alteration or use of a source. Link Energy was not required to submit a permit application for the current permit action because new sources are not being added to the facility and emissions from the facility are not being increased. (7) This rule requires that the applicant notify the public by means of legal publication in a newspaper of general circulation in the area affected by the application for a permit. Link Energy was not required to notify the public of the current permit action because new sources are not being added to the facility and emissions from the facility are not being increased.
  6. ARM 17.8.749 Conditions for Issuance or Denial of Permit. This rule requires that the permits issued by the Department must authorize the construction and operation of the facility or emitting unit subject to the conditions in the permit and the requirements of this subchapter. This rule also requires that the permit must contain any conditions necessary to assure compliance with the Federal Clean Air Act (FCAA), the Clean Air Act of Montana, and rules adopted under those acts.
  7. ARM 17.8.752 Emission Control Requirements. This rule requires a source to install the maximum air pollution control capability that is technically practicable and economically feasible, except that BACT shall be utilized. The BACT analysis is discussed in Section III of this permit analysis.
  8. ARM 17.8.755 Inspection of Permit. This rule requires that air quality permits shall be made available for inspection by the Department at the location of the source.

9. ARM 17.8.756 Compliance with Other Requirements. This rule states that nothing in the permit shall be construed as relieving Link Energy of the responsibility for complying with any applicable federal or Montana statute, rule, or standard, except as specifically provided in ARM 17.8.740, *et seq.*
  10. ARM 17.8.759 Review of Permit Applications. This rule describes the Department's responsibilities for processing permit applications and making permit decisions on those permit applications that do not require the preparation of an environmental impact statement.
  11. ARM 17.8.762 Duration of Permit. An air quality permit shall be valid until revoked or modified, as provided in this subchapter, except that a permit issued prior to construction of a new or altered source may contain a condition providing that the permit will expire unless construction is commenced within the time specified in the permit, which in no event may be less than 1 year after the permit is issued.
  12. ARM 17.8.763 Revocation of Permit. An air quality permit may be revoked upon written request of the permittee, or for violations of any requirement of the Clean Air Act of Montana, rules adopted under the Clean Air Act of Montana, the FCAA, rules adopted under the FCAA, or any applicable requirement contained in the Montana State Implementation Plan (SIP).
  13. ARM 17.8.764 Administrative Amendment to Permit. An air quality permit may be amended for changes in any applicable rules and standards adopted by the Board of Environmental Review (Board) or changed conditions of operation at a source or stack that do not result in an increase of emissions as a result of those changed conditions. The owner or operator of a facility may not increase the facility's emissions beyond permit limits unless the increase meets the criteria in ARM 17.8.745 for a de minimis change not requiring a permit, or unless the owner or operator applies for and receives another permit in accordance with ARM 17.8.748, ARM 17.8.749, ARM 17.8.752, ARM 17.8.755, and ARM 17.8.756, and with all applicable requirements in ARM Title 17, Chapter 8, Subchapters 8, 9, and 10.
  14. ARM 17.8.765 Transfer of Permit. This rule states that an air quality permit may be transferred from one person to another if written notice of Intent to Transfer, including the names of the transferor and the transferee, is sent to the Department.
- F. ARM 17.8, Subchapter 8 – Prevention of Significant Deterioration of Air Quality, including, but not limited to:
1. ARM 17.8.801 Definitions. This rule is a list of applicable definitions used in this subchapter.
  2. ARM 17.8.818 Review of Major Stationary Sources and Major Modifications--Source Applicability and Exemptions. The requirements contained in ARM 17.8.819 through ARM 17.8.827 shall apply to any major stationary source and any major modification, with respect to each pollutant subject to regulation under the FCAA that it would emit, except as this subchapter would otherwise allow.

This facility is not a major stationary source since this facility is not a listed source and the facility's PTE is below 250 tons per year of any pollutant (excluding fugitive emissions).

G. ARM 17.8, Subchapter 12 – Operating Permit Program Applicability, including, but not limited to:

1. ARM 17.8.1201 Definitions. (23) Major Source under Section 7412 of the FCAA is defined as any source having:
  - a. PTE > 100 tons/year of any pollutant;
  - b. PTE > 10 tons/year of any one Hazardous Air Pollutant (HAP), PTE > 25 tons/year of a combination of all HAPs, or lesser quantity as the Department may establish by rule; or
  - c. PTE > 70 tons/year of PM<sub>10</sub> in a serious PM<sub>10</sub> nonattainment area.
2. ARM 17.8.1204 Air Quality Operating Permit Program. (1) Title V of the FCAA amendments of 1990 requires that all sources, as defined in ARM 17.8.1204(1), obtain a Title V Operating Permit. In reviewing and issuing Air Quality Permit #3183-01 for Link Energy, the following conclusions were made.
  - a. The facility's PTE is less than 100 tons/year for any pollutant.
  - b. The facility's PTE is less than 10 tons/year for any one HAP and less than 25 tons/year for all HAPs.
  - c. This source is not located in a serious PM<sub>10</sub> nonattainment area.
  - d. This facility is subject to a current NSPS standard (40 CFR 60, Subpart Kb).
  - e. This facility is not subject to any current NESHAP standards.
  - f. This source is not a Title IV affected source, nor a solid waste combustion unit.
  - g. This source is not an EPA designated Title V source.

Based on these facts, the Department determined that Link Energy will be a minor source of emissions as defined under Title V. However, if minor sources subject to NSPS are required to obtain a Title V Operating Permit, Link Energy will be required to obtain a Title V Operating Permit.

### III. BACT Determination

A BACT determination is required for each new or altered source. Link Energy shall install on the new or altered source the maximum air pollution control capability, which is technically practicable and economically feasible, except that BACT shall be utilized. However, a BACT analysis was not required for the current permit action because new sources are not being added to the facility and emissions from the facility are not increasing. The current permit action is considered an administrative action.

#### IV. Emission Inventory

Tank #	Source	Tons/Year						
		PM	PM <sub>10</sub>	NO <sub>x</sub>	CO	VOC	SO <sub>x</sub>	HAPs
#88272	400 bbl Crude Oil Storage Tank	-----	-----	-----	-----	8.68	-----	0.936
#88273	400 bbl Crude Oil Storage Tank	-----	-----	-----	-----	8.68	-----	0.936
#88274	400 bbl Crude Oil Storage Tank	-----	-----	-----	-----	8.68	-----	0.936
#88275	400 bbl Crude Oil Storage Tank	-----	-----	-----	-----	8.68	-----	0.936
N/A	Pipeline Component Fugitives	-----	-----	-----	-----	2.96	-----	0.319
N/A	Haul Roads	5.11	1.16	-----	-----	-----	-----	-----
<b>Totals</b>		<b>5.11</b>	<b>1.16</b>	-----	-----	<b>37.68</b>	-----	<b>4.06</b>

##### Tanks (standing and working losses from facility storage tanks):

Total Tank 88272 VOC emissions = 17,361.83 lb/yr \* 0.0005 ton/lb = 8.68 ton/yr

Total Tank 88273 VOC emissions = 17,361.83 lb/yr \* 0.0005 ton/lb = 8.68 ton/yr

Total Tank 88274 VOC emissions = 17,361.83 lb/yr \* 0.0005 ton/lb = 8.68 ton/yr

Total Tank 88275 VOC emissions = 17,361.83 lb/yr \* 0.0005 ton/lb = 8.68 ton/yr

Total VOC emissions from tanks: 34.72 ton/yr

Emissions calculated using EPA Tanks v.4.0 Storage Tank Emissions Calculation Software.

##### Tanks HAP Emission Calculations

Basis for Speciation Factors: EPA Speciate Program Profile No. 1210 – Pipeline Terminal Tanks

HAP	Speciation Factor (% HAP in vapor phase)	VOC Emissions (ton/yr)	HAP Emissions (ton/yr)
Benzene	0.0054	34.72	0.187488
Toluene	0.009	34.72	0.31248
Ethylbenzene	0.0073	34.72	0.253456
Xylene	0.0089	34.72	0.309008
Toluene	0.0469	34.72	1.628368
Tolulene	0.0303	34.72	1.052016
Total HAPs from Tanks			3.742816 ton/yr

##### Fugitive VOC Emission Calculations (calculated at 100% VOC)

Basis for Emission Factors: EPA Protocol for Equipment Leak Emission Estimates, November 1995 (EPA-453/R-95-017)

Connector: 30 components in light oil service ( $\geq 20$  API Gravity)  
Emission Factor: 0.011111184 lb/day  
Calculation: 30 components \* 0.011111184 lb/day-component \* 365 day/yr \* 0.0005 ton/lb = 0.06 ton/yr

Flange: 240 components in light oil service ( $\geq 20$  API Gravity)  
Emission Factor: 0.005820144 lb/day-component  
Calculation: 240 components \* 0.005820144

Open-ended Line: 8 components in light oil service ( $\geq 20$  API Gravity)  
Emission Factor: 0.07407456 lb/day  
Calculation: 8 components \* 0.07407456 lb/day-component \* 365 day/yr \* 0.0005 ton/lb = 0.11 ton/yr

Other: 10 components in light oil service ( $\geq 20$  API Gravity)  
Emission Factor: 0.396828 lb/day  
Calculation: 10 components \* 0.396828 lb/day-component \* 365 day/yr \* 0.0005 ton/lb = 0.72 ton/yr

Pump: 3 components in light oil service ( $\geq 20$  API Gravity)  
 Emission Factor: 0.6878352 lb/day  
 Calculation: 3 components \* 0.6878352 lb/day-component \* 365 day/yr \* 0.0005 ton/lb = 0.38 ton/yr

Valve: 60 components in light oil service ( $\geq 20$  API Gravity)  
 Emission Factor: 0.132276 lb/day  
 Calculation: 60 components \* 0.132276 lb/day-component \* 365 day/yr \* 0.0005 ton/lb = 1.44 ton/yr

Total Fugitives from Piping: 2.96 ton/yr

#### Fugitive HAP Emission Calculations

Basis for Speciation Factors: EPA Speciate Program Profile No. 1210 – Pipeline Terminal Tanks

HAP	Speciation Factor (% HAP in vapor phase)	VOC Emissions (ton/yr)	HAP Emissions (ton/yr)
Benzene	0.0054	2.96	0.015984
Toluene	0.009	2.96	0.02664
Ethylbenzene	0.0073	2.96	0.021608
Xylene	0.0089	2.96	0.026344
Toluene	0.0469	2.96	0.138824
Tolulene	0.0303	2.96	0.089688
Total Fugitive HAPs			0.319088 ton/yr

#### Haul Roads: Fugitive PM and PM<sub>10</sub> Emissions from Unpaved Roads

Basis for Emission Factors: AP-42, Section 13.2.2 (9/98), Unpaved Roads

Semi-trucks: 1,576,800 bbl/yr total throughput / 280.0 bbl/truck \* 0.25 VMT/truck = 1407.86 VMT/yr

PM = 1407.86 VMT/yr \* 5.527327 lb/VMT \* 0.0005 ton/lb = 3.89 ton/yr

PM<sub>10</sub> = 1407.86 VMT/yr \* 1.177493 lb/VMT \* 0.0005 ton/lb = 0.83 ton/yr

Pickups: 1460 truck/yr \* 0.5 VMT/truck = 730 VMT/yr

PM = 730 VMT/yr \* 3.333104 lb/VMT \* 0.0005 ton/lb = 1.22 ton/yr

PM<sub>10</sub> = 730 VMT/yr \* 0.902467 lb/VMT \* 0.0005 ton/lb = 0.33 ton/yr

See permit application #3183-00 for detailed emission inventory information.

## V. Existing Air Quality

The Link Energy Richland Crude Oil Station is located in eastern Montana in a sparsely populated area with generally very good ventilation throughout the year. There are several significant air pollution sources in the surrounding area (coal-fired power plant, sugar plant, two natural gas processing plants, coal strip mine, natural gas and oil well flares and vents). Ambient monitoring for several pollutants was discontinued in the area in 1987 due to a history of low ambient concentrations and good meteorological dispersion. While there is no current ambient air monitoring data from nearby monitors available, the Department does not believe the area is in danger of approaching any ambient air quality standards at the present time.

## VI. Ambient Air Impact Analysis

The current permit action will not have an effect on the existing air quality because emissions are not increasing.

## VII. Taking or Damaging Implication Analysis

As required by 2-10-105, MCA, the Department conducted a private property taking and damaging assessment and determined there are no taking or damaging implications.

## VIII.Environmental Assessment

This permitting action will not result in an increase of emissions from the facility and is considered an administrative action; therefore, an Environmental Assessment is not required.

Analysis Prepared By: Dave Aguirre

Date: December 19, 2003